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REMARKS

The pending claims are directed to subject matter presented in Figs. 12-17. Priority to those applications which did not include those Figures is being cancelled.

Claims 1, 4, 8 and 12 were rejected under 35 U.S.C. 102(b) as being anticipated by Downes et al. (U.S. Patent 5,589,669), and the remaining claims were rejected under 35 U.S.C. 103(a) as being unpatentable over Downes et al. in combination with Roberts et al. (U.S. Patent 6,335,548). Those rejections are respectfully traversed and reconsideration is requested.

For the claimed chamfered flange, the Examiner has referred to Figure 8 of Downes et al., specifically identifying item 58 as a flange and item 66 as a chamfer. To the contrary, as illustrated in Figs. 8 and 9 and as described at column 6, the elements 58 are not flanges but rather "stops" which only extend from the three vertices 60 of the base 56. A flange is a rim that wraps substantially around the pin, and that term does not apply to the stops 58. The stops of Figs. 8 and 9 would only provide minimal surface area for bonding the pin with solder. Downes et al. does show and describe a flange 38 in Figs. 5 and 6. However, that flange is not chamfered and does not allow for venting.

Thus, Downes et al. has provided one embodiment which provides the extended bonding surface area of a flange but no feature for venting and another embodiment which provides for venting but only minimal radial surface area for solder bonding. The present invention, on the other hand, provides a flange for an extensive bonding surface and also at least one chamfer for venting. As illustrated in Fig. 17, the chamfered regions also serve as bonding surfaces after any gases are vented. Thus, the present invention provides for extensive bonding surface, as in the Fig. 5 embodiment of Downes et al., and significant venting as found in the Figure 8 embodiment of Downes et al. Unlike any embodiment in Downes et al., both extensive bonding surface and venting are provided by the present invention.

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With respect to claims 2-3, 5-7, 9-11 and 13-16, the Examiner has acknowledged that Downes et al. fails to teach two opposed chamfers. (The Examiner also indicates that Downes et al. fails to teach wave soldering or reflow soldering. However, for those features note Downes et al. at column 6, lines 18-26.) For opposed chamfers, the Examiner refers to Roberts et al. at column 12, lines 25-45, column 9, lines 60-65 and column 2, lines 45-68. The undersigned can find no suggestion in any of those excerpts of a chamfered flange. There is, at column 9, line 64, reference to the heat extraction member 204 being chamfered; however, that member is simply a heat conducting plate and teaches nothing toward the features of a flange on a printed circuit board pin which abuts a printed circuit board into which a pin is inserted. In fact, the undersigned can find no suggestion of what part of the plate 204 would be chamfered and for what purpose.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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